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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION I
5 POST OFFICE SQUARE, SUITE 100
BOSTON, MASSACHUSETTS 02109-3912

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

JUL 26 2011

Mr. Bradford Manning, Director
Environmental Health and Safety
University of New Hampshire
Perpetuity Hall
11 Leavitt Lane
Durham, New Hampshire 03824-3522

Re: PCB Cleanup and Disposal Approval under 40 CFR § 761.61 (c) and §761.79(h)
Stillings Dining Hall, University of New Hampshire

Dear Mr. Manning:

This is in response to the Notification [1] by the University of New Hampshire (UNH) to abate PCB caulk and PCB-contaminated materials located in the UNH Stillings Dining Hall, 20 Ballard Street, Durham, New Hampshire (the Site). The Site contains PCB caulk, PCB-contaminated *porous surfaces* (i.e., concrete, brick, and CMU) and *non-porous surfaces* (i.e., steel lintels and aluminum braces) that exceed the allowable PCB levels under the federal PCB regulations for unrestricted use at 40 CFR § 761.20(a), § 761.61, and § 761.62. In its abatement plan, UNH proposes the following activities:

- Remove PCB caulk and associated window/door frames in contact with PCB caulk and disposed of as greater than or equal to ($\geq$ 50 ppm in a TSCA-approved or RCRA hazardous waste landfill;
- Decontaminate *non-porous surfaces* (i.e., steel lintels and aluminum braces) to less than or equal to ($\leq$10 µg/100 cm^2;
- With the exception of the interior stair windows and associated doors, encapsulate PCB-contaminated *porous surfaces* with two coats of epoxy coating at a minimum of 6 inches from the caulk joint;
- Encapsulate PCB-contaminated *porous surfaces* located adjacent to the interior stair windows and associated doors with two coats of epoxy coating at a minimum of 12 inches from the caulk joint;
- Remove soil with greater than (>) 1 ppm PCBs at the drip lines and dispose of as ≥50 ppm PCB waste in a TSCA-approved or RCRA hazardous waste landfill; and,

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1 Information was submitted on behalf of the UNH by Desmarais Environmental, Inc. The information was provided to satisfy the notification requirement under 40 CFR § 761.61(a). Information was provided dated March 29, 2011 (SIP); June 6, 2011 (Amendment to SIP); July 8, 2011 (email response to questions); and July 13, 2011 (email response to July 13, 2011 verbal communications). These submittals will be referred to as the "Notification."

- Install windows in order to provide a structural barrier over the PCB contaminated *porous surfaces*.

Based on the EPA's review, the information provided in the Notification meets the requirements under § 761.62(a) and § 761.79(h) for abatement of PCB caulk and § 761.61(c) for encapsulation of the *porous surfaces*. EPA finds that the proposed encapsulation of PCB contaminated *porous surfaces* should effectively prevent direct exposure of these PCB contaminated *porous surfaces* to building users provided the physical barriers are maintained. As such, EPA may approve the encapsulation under § 761.61(c).

UNH has proposed a deviation from the verification sampling frequency specified under § 761.61(a)(6). The proposed alternative verification sampling for *non-porous surfaces* (i.e., steel lintels and aluminum braces), is one sample for the first 5 steel lintels and aluminum braces (5 samples of each material type). If samples consistently meet the PCB cleanup standard, then the sampling frequency would be lowered to one sample per every 5 steel lintels and aluminum braces (9 samples total for each material type).

EPA has determined that the sampling plan and alternative verification sampling will be sufficient to confirm that PCB cleanup standards have been met and will not create an unreasonable risk to public health or the environment. EPA may approve the alternative verification sampling under § 761.61(c).

UNH may proceed with its project in accordance with 40 CFR § 761.61(c); § 761.62(a); § 761.79(h); its Notification; and, this Approval, subject to the conditions of Attachment 1. Under this Approval, EPA is reserving its right to require additional investigation or mitigation measures should the results of the long-term monitoring sampling indicate an unreasonable risk to the building users.

Please note that UNH will be required to record a notation on the deed as required under § 761.61(a)(8) since PCBs at greater than (>) 1 ppm will remain on the Site.

In the Notification, UNH provided its outreach information for building users on the proposed PCB abatement work. Please note that Attachment 1, Condition 19.b. requires that the long-term operations, maintenance, and monitoring plan (MMIP) include a communications component which will provide information concerning the PCBs that will remain on-site after remediation, to the Site users, including teachers, parents, students, other on-site workers, and interested stakeholders.

Questions and correspondence regarding this Approval should be directed to:

Kimberly N. Tisa, PCB Coordinator (OSRR07-2)
United States Environmental Protection Agency
5 Post Office Square, Suite 100
Boston, Massachusetts 02109-3912
Telephone: (617) 918-1527
Facsimile: (617) 918-0527

EPA shall not consider this project complete until it has received all submittals required under this Approval. Please be aware that upon EPA receipt and review of the submittals, EPA may request any additional information necessary to establish that the work has been completed in accordance with 40 CFR Part 761, the Notification, and this Approval.

Sincerely,

FOR JTO

James T. Owens III, Director
Office of Site Remediation & Restoration

cc: R. Desmarais, Desmarais Environmental, Inc
K. DuBois, NHDES
File

Attachment 1- Conditions
Attachment 2 – Porous Surface Sampling SOP

ATTACHMENT 1:

PCB CLEANUP AND DISPOSAL APPROVAL CONDITIONS
UNIVERSITY OF NEW HAMPSHIRE - STILLINGS DINING HALL
20 BALLARD STREET
DURHAM, NEW HAMPSHIRE

GENERAL CONDITIONS

1. This Approval is granted under the authority of Section 6(e) of the Toxic Substances Control Act (TSCA), 15 U.S.C. § 2605(e), and the PCB regulations at 40 CFR Part 761, and applies solely to the *PCB bulk product waste* and *PCB remediation waste* identified in the Notification and located at the Site.

2. The University of New Hampshire (UNH) shall conduct on-site activities in accordance with the conditions of this Approval and with the Notification.

3. In the event that the activities described in the Notification differ from the conditions specified in this Approval, the conditions of this Approval shall govern.

4. The terms and abbreviations used herein shall have the meanings as defined in 40 CFR § 761.3 unless otherwise defined within this Approval.

5. UNH must comply with all applicable federal, state and local regulations in the storage, handling, and disposal of all PCB wastes, including PCBs, PCB Items and decontamination wastes generated under this Approval. In the event of a new spill during response actions, UNH shall contact EPA within twenty-four (24) hours for direction on sampling and cleanup requirements.

6. UNH is responsible for the actions of all officers, employees, agents, contractors, subcontractors, and others who are involved in activities conducted under this Approval. If at any time UNH has or receives information indicating that UNH or any other person has failed, or may have failed, to comply with any provision of this Approval, it must report the information to EPA in writing within twenty-four (24) hours of having or receiving the information.

7. This Approval does not constitute a determination by EPA that the transporters or disposal facilities selected by UNH are authorized to conduct the activities set forth in the Notification. UNH is responsible for ensuring that its selected transporters and disposal facilities are authorized to conduct these activities in accordance with all applicable federal, state and local statutes and regulations.

8. This Approval does not: 1) waive or compromise EPA's enforcement and regulatory authority; 2) release UNH from compliance with any applicable requirements of federal, state or local law; or 3) release UNH from liability for, or otherwise resolve, any violations of federal, state or local law.

NOTIFICATION AND CERTIFICATION CONDITIONS

9. This Approval may be revoked if the EPA does not receive written notification from UNH of their acceptance of the conditions of this Approval within ten 10 business days of receipt.

10. UNH shall notify EPA in writing of the scheduled date of commencement of on-site activities at least one (1) business day prior to conducting any work under this Approval.

11. Prior to initiating onsite work under this Approval, UNH shall submit the following information for EPA review and/or approval:

    a. A certification signed by its selected contractor, stating that the contractor(s) has read and understands the Notification, and agrees to abide by the conditions specified in this Approval;

    b. A contractor work plan prepared and submitted by the selected contractor(s), detailing the procedures that will be employed for remediation of PCB-contaminated materials and for containment and air monitoring during removal and remediation activities. The work plan should include information about the process to be used to decontaminate the steel sleeves, as well as information on waste storage, handling, and disposal for each waste stream type and for equipment decontamination; and,

    c. A certification signed by the selected analytical laboratory, stating that the laboratory has read and understands the analytical and quality assurance requirements specified in the Notification and in this Approval.

REMEDIAL AND DISPOSAL CONDITIONS

12. To the maximum extent practical, engineering controls shall be utilized to minimize the potential for PCB releases during the abatement. In addition, to the maximum extent possible, disposable equipment and materials, including PPE, will be used to reduce the amount of decontamination necessary.

13. All visible residues of PCB-contaminated caulk (i.e. *PCB bulk product waste*) shall be removed as described in the Notification.

14. The decontamination standard for *non-porous surfaces* (i.e. steel lintels and aluminum braces) shall be less than or equal to ($\leq$ 10 µg/100 cm^2 PCBs.

    a. Verification sampling of decontaminated materials shall be performed as follows:

        i) *Non-porous surface* sampling shall be performed on a surface area basis by the standard wipe test as specified in 40 CFR § 761.123 (i.e., µg/100 cm^2).

        ii) If all PCB sampling results from the first 5 locations of each material type meets the $\leq$10 µg/100 cm^2 standard, UNH may use the following alternative verification sampling scheme for the remainder of the project. The alternative scheme requires, at a minimum, the collection of at least 1 verification sample every fifth lintel and 1 verification sample every fifth brace.

        iii) In the event **any** verification sample that is collected using the alternative sampling scheme exceeds the PCB cleanup standard, UNH shall contact EPA for a determination on the appropriate verification sampling frequency for the remaining surfaces. Alternatively, UNH shall continue to use the initial confirmatory sampling frequency for the remainder of this project.

    b. For decontaminated *non-porous surfaces* that have PCB concentrations exceeding the decontamination standard, UNH may conduct additional decontamination to achieve the required decontamination standard or must store and dispose of these wastes as TSCA-regulated waste in accordance with 40 CFR Part 761.

    c. Chemical extraction for PCBs shall be conducted using Methods 3500B/3540C of SW-846; and, chemical analysis for PCBs shall be conducted using Method 8082 of SW-846, unless another extraction or analytical method(s) is validated according to Subpart Q.

15. Following encapsulation of PCB-contaminated *porous surfaces* post-encapsulation sampling shall be conducted to determine the effectiveness of the encapsulation.

    a. Wipe sampling of encapsulated surfaces shall be performed on a surface area basis by the standard wipe test as specified in 40 CFR § 761.123 (i.e. µg/100 cm^2).

    b. Chemical extraction for PCBs shall be conducted using Method 3500B/3540C of SW-846; and, chemical analysis for PCBs shall be conducted using Method 8082 of SW-846, unless another extraction or analytical method(s) is validated according to Subpart Q.

    c. In the event that any wipe sample PCB concentration is greater than (>) 1 µg/100 cm^2, UNH shall contact EPA for further discussion and direction on alternatives.

    d. Following encapsulation, samples of the adjacent *porous surfaces* (i.e., CMU interior stair windows and associated doors) will be collected to verify that the PCB concentration is less than or equal to ($\leq$) 1 part per million (ppm) PCBs.

        i) Sampling for *porous surfaces* shall be performed on a bulk basis (i.e., mg/kg) and reported on a dry weight analysis. Sampling for *porous surfaces* shall be conducted in accordance with the EPA Region 1 *Standard Operating Procedure For Sampling Porous Surfaces for Polychlorinated Biphenyls (PCBs) Revision 4, May 5, 2011*, at a maximum depth interval of 0.5 inches, and in accordance with the frequency specified in the Notification.

        ii) Chemical extraction for PCBs shall be conducted using Methods 3500B/3540C of SW-846; and, chemical analysis for PCBs shall be conducted using Method 8082 of SW-846, unless another extraction/analytical method(s) is validated according to Subpart Q.

        iii) In the event that the *porous surfaces* do not meet the standard of $\leq$1 ppm, the encapsulation shall be extended to cover the > 1 ppm PCB–contaminated *porous surfaces* as described in the Notification.

16. The cleanup level for *PCB remediation waste* (i.e. soil) at the Site shall be less than or equal to ($\leq$) 1 ppm.

    a. Bulk *PCB remediation waste* (i.e. soil) samples shall be collected on a bulk basis (e.g. mg/Kg) and reported on a dry-weight basis.

    b. Chemical extraction for PCBs shall be conducted using Methods 3500B/3540C of SW-846; and, chemical analysis for PCBs shall be conducted using Method 8082 of SW-846, unless another extraction/analytical method(s) is validated according to Subpart Q.

    c. If composite samples of soil are collected as described in the Notification, the following shall apply:

        i) The composite shall be prepared using equal volumes of each grab sample in accordance with § 761.289(a); and,

        ii) The composite sample analytical results shall be adjusted by multiplying the composite analytical results by the number of grab samples comprising the composite. This adjusted result shall be used to determine if the cleanup requirements for the *PCB remediation waste* have been met.

17. PCB waste (at any concentration) generated as a result of the activities described in the Notification, excluding any decontaminated materials, shall be marked in accordance with § 761.40; stored in a manner prescribed in § 761.65; and, disposed of in accordance with 40 CFR § 761.61 or § 761.62, unless otherwise specified below:

    a. Decontamination wastes and residues shall be disposed of in accordance with 40 CFR § 761.79(g)(6).

    b. Moveable equipment, tools, and sampling equipment shall be decontaminated in accordance with either 40 CFR § 761.79(b)(3)(i)(A), § 761.79(b)(3)(ii)(A), or § 761.79(c)(2).

    c. PCB-contaminated water generated during decontamination shall be decontaminated in accordance with 40 CFR § 761.79(b)(1) or disposed of under § 761.60.

DEED RESTRICTION AND USE CONDITIONS

18. Within thirty (30) days of completing the activities described in the Notification and in the Approval, UNH shall submit for EPA review and approval, a draft deed restriction for the Site. The deed restriction shall include: a description of the extent and levels of contamination at the Site following abatement; a description of the actions taken at the Site; a description of the use restrictions for the Site; and the long-term monitoring and maintenance requirements on the Site. Within seven (7) days of receipt of EPA's approval of the draft deed restriction, UNH shall record the deed restriction. A copy of this Approval shall be attached to the deed restriction.

INSPECTION, MODIFICATION AND REVOCATION CONDITIONS

19. Within 60 days of completion of the work authorized under this Approval, UNH shall submit for EPA's review and approval, a detailed monitoring and maintenance implementation plan (MMIP) for the surface barriers. UNH shall incorporate any changes to the MMIP required by EPA.

    a. The MMIP shall include: a description of the activities that will be conducted, including inspection criteria, frequency, and routine maintenance activities; sampling protocols, sampling frequency, and analytical criteria; and, reporting requirements, as applicable

    b. The MMIP shall include a communications component which details how the maintenance and monitoring results will be communicated to the Site users, including teachers, parents, student, other on-site workers, and interested stakeholders.

20. UNH shall allow any authorized representative of the Administrator of the EPA to inspect the Site and to inspect records and take samples as may be necessary to determine compliance with the PCB regulations and this Approval. Any refusal by UNH to allow such an inspection (as authorized by Section 11 of TSCA) shall be grounds for revocation of this Approval.

21. Any proposed modification(s) in the plan, specifications, or information in the Notification must be submitted to EPA no less than 14 calendar days prior to the proposed implementation of the change. Such proposed modifications will be subject to the procedures of 40 CFR § 761.61(a)(3)(ii).

22. Any departure from the conditions of this Approval without prior, written authorization from the EPA may result in the revocation, suspension and/or modification of the Approval, in addition to any other legal or equitable relief or remedy the EPA may choose to pursue.

23. Any misrepresentation or omission of any material fact in the Notification or in any future records or reports may result in the EPA's revocation, suspension and/or modification of the Approval, in addition to any other legal or equitable relief or remedy the EPA may choose to pursue.

24. Approval for these activities may be revoked, modified or otherwise altered: if EPA finds a violation of the conditions of this Approval or of 40 CFR Part 761, including EPA's PCB Spill Cleanup Policy, or other applicable rules and regulations; or if EPA finds that these activities present an unreasonable risk to public health or the environment.

25. UNH shall allow any authorized representative of the Administrator of the EPA to inspect the Site and to inspect records and take samples as may be necessary to determine compliance with the PCB regulations and this Approval. Any refusal by UNH to allow such an inspection (as authorized by Section 11 of TSCA) shall be grounds for revocation of this Approval.

RECORDKEEPING AND REPORTING CONDITIONS

26. UNH shall prepare all records and documents required by 40 CFR Part 761, including, but not limited to, the records required by Subparts J and K. UNH shall maintain a written record of the cleanup and the analytical sampling for activities conducted under this Approval at the Site. UNH shall maintain all records and documents as required by 40 CFR Part 761. All records shall be made available for inspection by authorized representatives of the EPA, until such time as EPA approves in writing a request for an alternative disposition of such records.

27. UNH shall submit a final report to the EPA within 90 days of completion of the activities authorized under this Approval. At a minimum, this final report shall include: a short narrative of the project activities; characterization and confirmation sampling analytical results; copies of the accompanying analytical chains of custody; field and laboratory quality control/quality assurance checks; an estimate of the quantity of PCB waste disposed of and the size of the PCB cleanup area(s); copies of manifests and bills of lading; and copies of certificates of disposal or similar certifications issued by the disposer. The Report shall also include a copy of the recorded deed restriction and a certification signed by a UNH official verifying that the authorized activities have been implemented in accordance with this Approval and the Notification.

28. Required submittals shall be mailed to:

Kimberly N. Tisa, PCB Coordinator
United States Environmental Protection Agency
5 Post Office Square, Suite 100
Mail Code: OSRR07-2
Boston, Massachusetts 02109-3912

29. No record, report or communication required under this Approval shall qualify as a self-audit or voluntary disclosure under EPA audit, self disclosure or penalty policies.

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END OF ATTACHMENT 1